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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,599	09/29/2003	Alan Alexander Burns		2402
40318	7590	09/07/2005		
ALAN BURNS 108 RAMONA ROAD PORTOLA VALLEY, CA 94028			EXAMINER ALLEN, ANDRE J	
			ART UNIT 2855	PAPER NUMBER
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,599

Applicant(s)

BURNS, ALAN ALEXANDER

Examiner

Andre J. Allen

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9-29-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagatsuma et al (US 4581579).

Regarding claim 1 Nagatsuma et al teaches providing a magnetic field having a particular direction, locating a magneto-optical cell within the provided magnetic field B (col. 4 line 8); providing a source of light for transmission through the magneto-optical cell A (col. 4 line 8); measuring C (col. 4 line 8) light transmission properties of the magneto-optical cell in relation to changes in the direction the provided magnetic field relative to the orientation of the magneto-optical cell.

Regarding claim 2 Nagatsuma et al teaches the walls of the magneto-optical cell comprise one or more layers (col. 4 line 62).

Regarding claims 3-5 and 7 Nagatsuma et al teaches materials that contain light transparency, reflecting properties (abstract) and polarizing properties (col. 2 ;ines 25-30).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6,8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatsuma et al. in view of Allen et al (US 2003/0090012)

Regarding claim 6 Nagatsuma et al does not teach has the property or anchoring a liquid crystal director. Allen et al teaches has the property or anchoring a liquid crystal director [0097]. Therefore, it would have been obvious to a person having ordinary skill in the art of displays at the time the invention was made to modify the device taught by Nagatsuma et al to include anchoring a liquid crystal director as taught by Allen et al for the purpose of producing a polarization rotator element (Allen et al [0012]).

Regarding claims 8-11 Nagatsuma et al does not teach a liquid crystal having dichroic (polarization dependent) light absorption properties, smectic, nematic, discotic, chiral and ferronematic. Allen et al teaches a liquid crystal having dichroic (polarization dependent) light absorption properties [0010] and smectic, nematic [0009], discotic, chiral and ferronematic materials. It would have been obvious to a person having ordinary skill in the art of displays at the time the invention was made to modify the device taught by Nagatsuma et al to include a liquid crystal having dichroic (polarization dependent) light absorption properties and

any other material that would be used to create a LCD display as taught by Allen et al for the purpose of producing a reflective polarizater rotator element (Allen et al [0010]).

Allowable Subject Matter

2. Claims 11-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The foregoing claims are deemed to be a distinct and no-obvious improvement over Nagatsuma et al. in view of Allen et al . The claims include polarizing light in more than one direction and orienting each pixel element within the display to control the light transmission properties of each pixel in accordance with the relative orientation of each pixel to the direction of the provided magnetic field and varying the direction of the magnetic field.

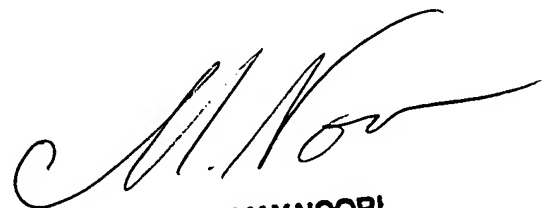
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André Allen
Patent Examiner
Art Unit 2855



MAX NOORI
PRIMARY EXAMINER